



## **Building Energy Code Education-**

## **Circuit Rider Program**

### **Project Team**

- Michael Adams, Program Planner, Iowa Department of Natural Resources
- Craig Swartzbaugh, Iowa Building Code Consultants
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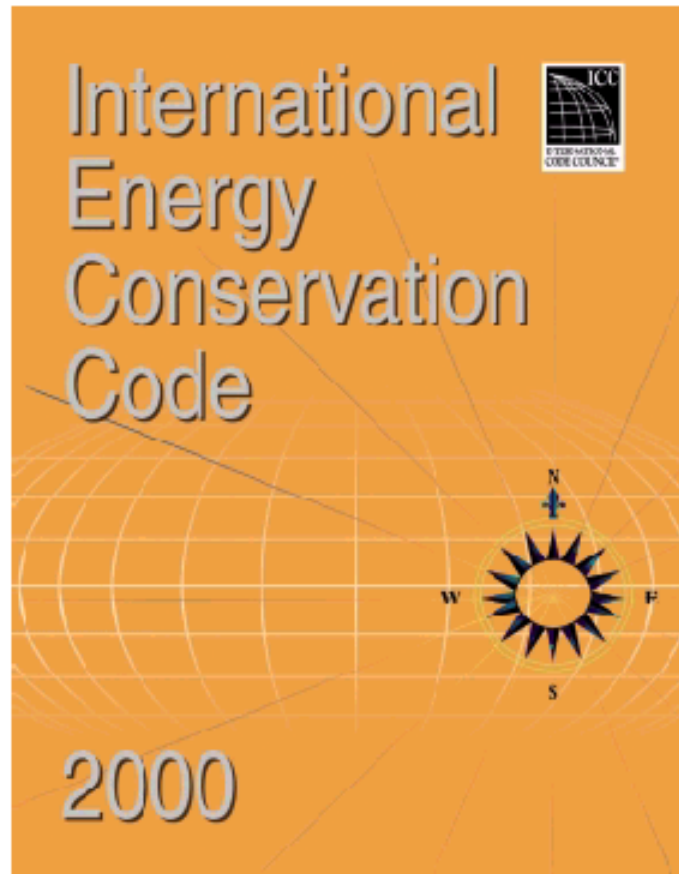
# **Energy Code Circuit Rider Program**

**We provide assistance to cities in adopting the International 2000 Energy Code**

**We provide workshops for Contractors, City Staff, Realtors, Appraisers, and Bankers**

**We provide inspections and training in energy code inspections**

# What is the IECC?



A REQUIRED  
MINIMUM LEVEL OF  
ENERGY EFFICIENCY  
IN NEW RESIDENTIAL  
CONSTRUCTION





# **ENERGY CODE ADOPTION BENEFITS**

- **A Comfortable and Quieter Home**
- **Improved Indoor Air Quality**
- **Quality Construction**
- **Higher Resale Value**
- **Access to Preferred Financing**

# **MORE BENEFITS**

- **Demonstrate compliance with State of Iowa Code requirements**
- **Reduce Utility Bills as Much as 30%**
- **Savings that can go back into the community, not leave Iowa**





# What is Energy Efficient?

*Tried and true technologies requiring no design changes!*

- ***Efficient Envelope***

Insulation, Tight Construction, Advanced Window

- ***Efficient Distribution***

Tight/Insulated Ducts or Internal Ducts

- ***Efficient Equipment***

Heating, Cooling, Hot Water









021120



OFFICE OF

**BUILDING** TECHNOLOGY,

STATE AND COMMUNITY PROGRAMS



U.S. Department of Energy  
Office of Codes and Standards

# 2000 International Energy Conservation Code

Using  
**MECcheck<sup>TM</sup>**

Produced by the Pacific Northwest National Laboratory





Project
Envelope
Mechanical

Ceiling
Skyflight
Wall
Window
Door
Basement
Floor
Crawl Wall

Create New Above-Grade Wall		Assembly	Gross Area or Slab Perimeter		Cavity Insulation R-Value	Continuous Insulation R-Value	U-Factor	UA	Depth of Insulation (ft)
<div>Building</div> <ul style="list-style-type: none"> <li>Ceiling 1</li> <li>Ceiling 2</li> <li>Wall 1                             <ul style="list-style-type: none"> <li>Door 1</li> <li>Window 1</li> <li>Door 2</li> </ul> </li> <li>Wall 2                             <ul style="list-style-type: none"> <li>Door 3</li> </ul> </li> <li>Floor 1</li> <li>Floor 2</li> <li>Floor 3</li> </ul>	1	Flat Ceiling or Scissor Truss	729	ft2	38.0	0.0	0.030	22	
	2	Flat Ceiling or Scissor Truss	592	ft2	30.0	0.0	0.035	21	
	3	Wood Frame, 16" o.c.	1647	ft2	13.0	6.0	0.061	82	
	4	Glass	84	ft2			0.610	51	
	5	Vinyl Frame, Double Pane with	204	ft2			0.450	92	
	6	Solid	20	ft2			0.540	11	
	7	Wood Frame, 16" o.c.	276	ft2	13.0	0.0	0.082	21	
	8	Solid	18	ft2			0.350	6	
	9	All-Wood Joist/Truss, Over Un	938	ft2	19.0	0.0	0.047	44	
	10	All-Wood Joist/Truss, Over Ou	32	ft2	30.0	0.0	0.033	1	
	11	Unheated Slab-On-Grade	82	ft		8.0	0.779	64	2.0

Compliance Passes
 Max. UA 467
 Your UA 415
11.1 % Better Than Code

Select the blue-on-white buttons to create a list of envelope components for the building.









# **Conclusion**

**Everyone Benefits**

**Communities**

**Home Buyers**

**Builders/ Contractors**

**Utility Companies**

**Banks**

**Iowa**